

**CLAIMS:**

Claim 8 is currently amended. This listing of claims will replace all prior versions and listings of claims in the application and is provided as a convenience to the Examiner.

1. (currently amended) A process for producing a protein concentrate from grain comprising the steps of:
  - (a) steeping the grain in water and sulphur dioxide under conditions that soften the grain;
  - (b) degerminating the grain to produce a degermed grain;
  - (c) removing fiber from the degermed grain to produce a starch-protein mixture;
  - (d) separating, mechanically or physically, the starch-protein mixture to produce a starch fraction and one or more protein-containing materials, wherein the one or more protein protein-containing materials comprise remaining starch molecules;
  - (e) [[a)] contacting the one or more protein-containing materials with one or more wet-mill streams and one or more carbohydrases to hydrolyze the remaining starch molecules, thereby producing produce at least one protein concentrate and at least one aqueous stream containing water-soluble carbohydrates; and
  - (f) [[b)] separating the protein concentrate from the aqueous stream containing water-soluble carbohydrates.
2. (previously presented) A process according to claim 1, further comprising defatting the protein-containing material.
3. (original) A process according to claim 2, wherein defatting the protein-containing material comprises contacting the protein-containing material with a solvent.
4. (original) A process according to claim 2, wherein defatting the protein-containing material comprises contacting the protein-containing material with an enzyme.
5. (currently amended) A process according to claim 1 or 20, wherein the one or more protein-containing materials comprises corn gluten.

6. (currently amended) A process according to claim 1, ~~wherein said process~~ further comprising a step of bleaching ~~[[step]]~~ the protein concentrate.
7. (currently amended) A process according to claim 1 or 20, wherein at least one of the one or more wet-mill streams is steep liquor, light steep water, heavy steep liquor, or mixtures thereof.
8. (currently amended) A process according to claim 1, wherein the aqueous stream containing water-soluble carbohydrates is recycled and used as one of the one or more wet-mill streams in step (e) ~~[[a]]~~.
9. (currently amended) A process according to claim 1, wherein at least one of the one or more protein-containing materials is selected from the group consisting of light gluten fraction, heavy gluten fraction, corn gluten concentrate, corn gluten meal, gluten cake, dewatered gluten, and mixtures thereof.
10. (currently amended) A process according to claim 1 or 20, wherein step ~~[[a]]~~ (e) or (f), respectively, takes place at a temperature of at least room temperature.
11. (currently amended) A process according to claim 1 or 20, wherein ~~[[said]]~~ the process comprises a membrane filtration step before and/or after step ~~[[b]]~~ (f) or (g), respectively.
12. (previously presented) A process according to claim 1, further comprising the step of drying the protein concentrate.
13. (currently amended) A process according to claim 1, wherein at least one of the one or more carbohydrases is selected from the group consisting of alpha amylase, dextrinase, pullulanase, glucoamylase, hemicellulase, cellulase, and mixtures thereof.
14. (previously presented) A process according to claim 1, further comprising contacting the one or more protein-containing materials, one or more wet-mill streams, and/or one or more carbohydrases with one or more enzymes that join protein fragments.
15. (previously presented) A process according to claim 14, wherein at least one of the one or more enzymes are selected from the group consisting of polyphenoloxidases and transglutaminases.

16. (previously presented) A process according to claim 1, further comprising contacting the one or more protein-containing materials, one or more wet-mill streams, and/or one or more carbohydrases with one or more pectinases.
17. (previously presented) A process according to claim 1, further comprising contacting the one or more protein-containing materials with one or more phytases.
18. (currently amended) A process according to claim 1 or 20, wherein greater than 2% of the solids in the protein-containing material are corn gluten.
19. (currently amended). A process according to claim 1 or 20, wherein the content of water-soluble carbohydrates in said aqueous stream is increased relative to the content of water-soluble carbohydrates in an aqueous stream produced in the absence of one or more carbohydrases.
20. (currently amended) A process for producing a protein concentrate from corn comprising the following steps of:
  - (a) steeping the corn in water and sulphur dioxide under appropriate conditions to produce a steeped corn kernel;
  - (b) degerminating the corn kernel to produce a degermed corn kernel;
  - (c) removing fiber from the degermed corn kernel to produce a starch-protein mixture;
  - (d) a. obtaining a protein-containing material produced following at least one separation step in the wet milling process, separating, mechanically or physically, the starch-protein mixture to produce a starch fraction and one or more protein-containing materials;
  - (e) [[b.]] contacting the one or more protein-containing materials with an aqueous stream of [[said]] a wet-milling process; with the protein-containing material,
  - (f) [[c.]] adding an effective amount of carbohydrase for converting starchy material in [[said]] the protein-containing materials into water-soluble carbohydrates, wherein [[said]] the carbohydrase is an amylase; and

- (g) ~~[[d.]] separating into a~~ the protein concentrate stream and from an aqueous stream enriched with the water-soluble carbohydrates.
21. (currently amended) A process according to claim 20, wherein ~~the separation~~ step (g) is carried out at a temperature greater than 45°C.
- 22-25. (cancelled)
26. (currently amended) A process according to claim 1, wherein ~~said separating the protein concentrate from the carbohydrate containing stream~~ step (f) is carried out at a temperature~~[[s]]~~ greater than 45°C.
27. (currently amended) ~~The method~~ A process according to claim 21 or 26, wherein microbial growth is substantially inhibited.
28. (currently amended) A process according to claim 1 or 20, further comprising performing a filtration step to remove components greater than 75 µm before step ~~[[b)]]~~ (f) or (g), respectively.
29. (previously presented) A process according to claim 1, wherein the carbohydrase is added in the form of malted grain.
30. (cancelled)
31. (currently amended) A process according to claim 1 or 20, wherein step ~~[[a)]]~~ (e) or (f), respectively, takes place at a temperature of at least 50°C.
32. (currently amended) A process according to claim 1 or 20, wherein step ~~[[a]]~~ (e) or (f), respectively, takes place at a temperature of at least 70°C.
33. (currently amended) A process according to claim 1 or 20, wherein step ~~[[a]]~~ (e) or (f), respectively, takes place at a temperature of at least 120°C.
34. (previously presented) A process according to claim 1, wherein the protein concentrate is contacted with water or a wet milling stream.
35. (currently amended) A process according to claim 20, wherein the aqueous stream containing water-soluble carbohydrates is recycled and used as one of the one or more wet-mill streams in step ~~[[a)]]~~ (e).

36. (currently amended) A process according to claim 20, wherein at least one of the one or more protein-containing materials is selected from the group consisting of light gluten fraction, heavy gluten fraction, corn gluten concentrate, corn gluten meal, gluten cake, dewatered gluten, and mixtures thereof.
37. (previously presented) A process according to claim 20, further comprising the step of drying the protein concentrate.
38. (currently amended) A process according to claim 20, ~~wherein said process~~ further comprising the step of [[a]] bleaching [[step]] the protein concentrate.
39. (previously presented) A process according to claim 20, further comprising defatting the protein-containing material.
40. (previously presented) A process according to claim 39, wherein defatting the protein-containing material comprises contacting the protein-containing material with a solvent.
41. (previously presented) A process according to claim 39, wherein defatting the protein-containing material comprises contacting the protein-containing material with an enzyme.
42. (new) A process according to claim 1, wherein the one or more carbohydrases is a liquefaction enzyme.